

What is claimed is:

1. A polymer dispersion wherein the components of a physical mixture comprising

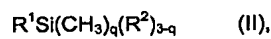
- 5 (i) at least one unsaturated silane of the general formula (I)



- 10 in which X is a hydrogen atom or a methyl group, Y is a divalent group selected from $-CH_2-$ and $-C(O)O-(CH_2)_3-$, n is 0 or 1, R is an alkoxy group selected from methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, and 2-methoxyethoxy, and p is 0 or 1,

and

- 15 (ii) at least one organosilane of the general formula (II)



- 20 in which R^1 is a linear, branched or cyclic alkyl group having 1 to 18 carbon atoms or is an aryl group or is a polyether group, R^2 is an alkoxy group selected from methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy and 2-methoxyethoxy, and q is 0 or 1,

- 25 and/or at least one silicic ester of the general formula (III)



- 30 in which groups R^3 are identical or different and R^3 is an alkoxy group selected from methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy and isobutoxy,

are incorporated into the framework of the polymer.

2. A process for preparing a polymer dispersion as claimed in claim 1, which comprises
- 5 - mixing at least one monomer and components (i) and (ii),
 - dispersing the mixture in surfactant-containing water, and
 - then carrying out the polymerization.
3. A process as claimed in claim 2,
 wherein
- 10 from 0.1 to 10% by weight of unsaturated silane (i) is used, based on the total amount of the monomers.
4. A process as claimed in claim 2 or 3,
 wherein
- 15 component (i) is used in a weight ratio to component (ii) of from 99.9:0.1 to 0.1:99.9.
5. A process as claimed in any of claims 2 to 4,
 wherein
- 20 an unsaturated silane selected from vinyltrimethoxysilane, vinyltriethoxysilane, vinyltri(2-methoxyethoxy)silane, vinylmethyldimethoxysilane, vinylmethyldiethoxysilane, 3-acryloyloxypropyltrimethoxysilane, 3-acryloyloxypropyltriethoxysilane, 3-acryloyloxypropylmethyldimethoxysilane, 3-acryloyloxypropylmethyldiethoxysilane, 3-methacryloyloxypropyl-trimethoxysilane, 3-methacryloyloxypropyltriethoxysilane, 3-methacryloyloxypropylmethyldimethoxysilane, 3-methacryloyloxypropylmethyldiethoxysilane or a mixture of
- 25 two or more of the aforementioned silanes is used as component (i).
6. A process as claimed in any of claims 2 to 5,
 wherein
- 30 an organosilane selected from methyltrimethoxysilane, n-propyltrimethoxysilane, n-propyltriethoxysilane, n-propyltri(2-methoxyethoxy)silane,

5 Isobutyltrimethoxysilane, isobutyltriethoxysilane, n-hexyltrimethoxysilane, n-octyltrimethoxysilane, n-octyltriethoxysilane, n-octyltri(2-methoxyethoxy)silane, isooctyltrimethoxysilane, isooctyltriethoxysilane, n-hexadecyltrimethoxysilane, phenyltrimethoxysilane, phenyltriethoxysilane, tetraethoxysilane, alkyl polyglycol propyltrimethoxysilane or a mixture of two or more of the
aforementioned silanes is used as component (ii).

7. A process as claimed in any claims 2 to 6,
wherein
10 a precursor stage of a polymer selected from polyacrylates, polymethacrylates, polystyrene acrylates, polyvinyl alcohols, and polyvinyl acetates is used as monomer.
8. A polymer dispersion obtainable as claimed in any of claims 2 to 7.
- 15 9. The use of a physical mixture of components (i) and (ii) as claimed in claim 1 for preparing a polymer dispersion.
10. The use of a polymer dispersion as claimed in any of claims 1 to 8 in a
20 concrete primer, in an adhesive or sealant or in an ink or paint.
11. An article prepared using a polymer dispersion as claimed in any of claims 1 to 10.